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(54) **TENSIONED SUPPORT RING FOR WIND AND WATER TURBINES**

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(57) **ABSTRACT**

It is a general object of the present invention to provide a new and less expensive method of creating a horizontal axis wind turbine for electrical power generation. This approach is based on a tensioned support ring in the shape of a regular polygon. This support ring is well suited to the construction of large wind turbines because it is very light, strong, and cost efficient to create. Also provided are two types of rotor supporting tower structures including a wheeled version for land use and another that floats on water. Additionally, a method of using the support ring to generate electrical power from underwater currents. Further provided is a rope drive method of transmitting energy from the support ring to a generator below. Finally, two methods of controlling blade pitch. Both methods have similar automatic feathering systems to protect against excessive rotational speeds.